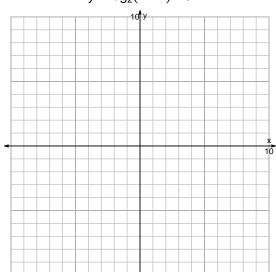
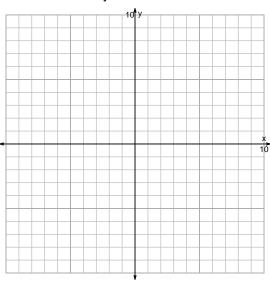
## s18quiz: EXP LOG (Practice v112)

1. Graph  $y = \log_2(x-4) + 3$  and  $y = 2^{x-4} - 6$  on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x-4) + 3$$



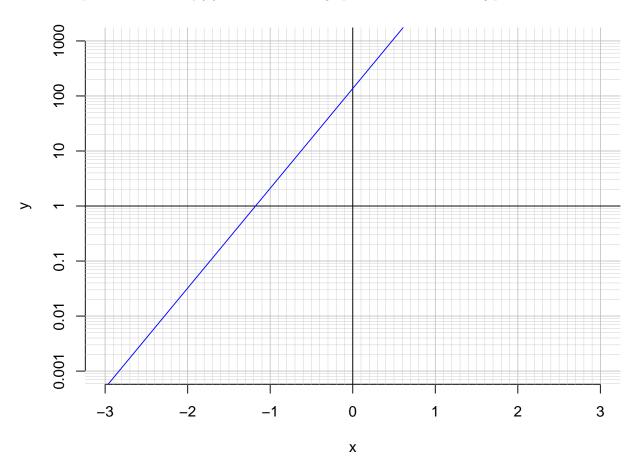
$$y = 2^{x-4} - 6$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$29 = \left(\frac{7}{5}\right) \cdot 2^{3t/4}$$

3. An exponential function  $f(x) = 137 \cdot e^{4.18x}$  is graphed below on a semi-log plot.



- a. Using the plot above, evaluate f(-1.3).
- b. Express  $f^{-1}(x)$ , the inverse of f.
- c. Using the plot above, evaluate  $f^{-1}(0.004)$ .